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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/775,612	02/10/2004	Edward Melomed	13768.1430	1584

47973 7590 07/29/2010
WORKMAN NYDEGGER/MICROSOFT
1000 EAGLE GATE TOWER
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EXAMINER	
SAINT CYR, LEONARD	

ART UNIT	PAPER NUMBER
2626	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/775,612	MELOMED ET AL.	
	Examiner	Art Unit	
	LEONARD SAINT CYR	2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 May 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1, 2, 4 – 7, 9, 10, 12, 13, 17 – 28, 30, 32, and 33* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 2, 4 – 7, 9, 10, 12, 13, 17 – 28, 30, 32, and 33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10 February 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 05/19/10 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims *1, 2, 4 – 7, 9, 10, 12, 13, 17 – 28, 30, 32, and 33* have been considered but are moot in view of the new ground(s) of rejection.

Applicants argue that neither Harris, nor Liddy et al., nor Park et al., teach or suggest a multidimensional database that stores analytical data; a unit conversion component configured to convert units of measurement from the base system language into units of measurement of the one or more other determined languages (Amendment, pages 12 – 14).

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims *1, 2, 4 – 7, 9, 10, 12, 13, 17 – 21 are* rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Although Claims *1, 2, 4 – 7, 9, 10, 12, 13, 17 – 21* appear to fall within a statutory category *(i.e., apparatus)*, Claims *1, 2, 4 – 7, 9, 10, 12, 13, 17 – 21* encompass nothing more than logic/software modules as per the specification *("*As used in this application, the terms "component" and "system" are intended to refer to a computer-related entity, either hardware, a combination of hardware and software, software, or software in execution. For example, a component may be, but is not limited to being, a process running on a processor, a processor, an object, an executable, a thread of execution, a program, and/or a computer*", Page 6, lines 11 - 18)*. Thus, Claims *1, 2, 4 – 7, 9, 10, 12, 13, 17 – 21* are directed to non-statutory subject matter because their scope includes a computer program embodiment, an abstract data structure which does not fall within one of the four statutory categories *(i.e., it is directed to a program per se)*. See also MPEP § 2106.IV.B.1.a. Data structures not claimed as embodied in computer readable media are descriptive material *per se* and are not statutory because they are not capable of causing functional change in the computer. See, e.g., *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure *per se* held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention, which permit the data structure's functionality to be realized. In contrast, a claimed computer readable medium encoded with a data structure defines structural and functional interrelationships

between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory. Similarly, computer programs claimed as computer listings *per se*, i.e., the descriptions or expressions of the programs are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer, which permit the computer program's functionality to be realized.

Claims *22 – 28, 30, 32, and 33* are rejected under 35 USC 101 as not falling within one of the four statutory categories of invention. While the claims recite a series of steps to be performed, a statutory process under 35 USC 101 must be tied to another statutory category (such as a manufacture or a machine) or transform underlying subject matter (such as an article or material) to a different state or thing. The steps in those claims can be performed manually without the use of a particular machine. Those claims could be done in a piece of paper, wherein a query input and the retrieved data corresponding to the query are translated based on definition rules that specify query syntax and semantic information. Thus, claims *17 – 28, 30, 32, and 33* do not define a statutory process.

Claim 28 is directed to a computer readable medium storing processor executable instructions that is not limited to a tangible, and thus, statutory medium. The

scope of "computer-readable medium" as defined in the specification might include signal-based mediums such as "signals used to propagate instructions", since disclose " Computer 1212 also includes removable/non-removable, volatile/non-volatile computer storage media. Fig. 12 illustrates, for example disk storage 1224" *(see Specification, Page 17, lines 16, and 17)*. A signal does not fall within one of the four statutory categories of invention *(i.e., process, machine, manufacture, or composition of matter)* because it is an ephemeral, transient signal and thus is non-statutory. Since the scope of "computer-readable medium" may include these non-statutory instances, claim 28 is directed to non-statutory subject matter.

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims *1, 2, 4 – 7, 9, 10, 12, 13, 17 – 28, 30, 32, and 33* are rejected under 35 U.S.C. 103(a) as being unpatentable over Harris (US PAP 2002/0059204) in view of Liddy et al., (US Patent 6,006,221),further in view of Park et al., (US Patent 6,064,951); and further in view of Cook et al., (US Patent 6,771,275).

As per claim 1, Harris teaches a data translation system for interacting with data stored in a database in a base system language and that is queryable using a specified query format, the data translation system facilitating user interaction with the stored data using the base system language or any of one or more other different languages, the base system language and the one or more other different languages each

corresponding to a language that humans use to verbally transfer information to one another, the data translation system (paragraph 47) comprising:

an interface component that receives user queries for stored data from a user, the queries receivable in the base system language and any of the one or more other different languages, the queries also receivable in the specified query format and any of a plurality of different query formats (**"Searches or queries can be initiated using natural language…dynamically generated customized query can be formed…in a language written or spoken by humans"**; paragraphs 7, and 37);

a translation component configured to receive user queries from the user interface and pass the received user queries to a query conversion component for conversion (**"A dictionary 18 can be equipped with a foreign language translator to convert received query information from one language, to another language that is compatible with the data source 20"**; paragraph 47);

a query conversion component, that is different from the translation component, the query conversion component for converting received user queries into converted user queries in the specified query format in the based system language (**"a customized dictionary that can convert a natural language or keyword search query to a precise SQL query… A dictionary 18 can be equipped with a foreign language translator to convert received query information from one language, to another language that is compatible with the data source 20"**; paragraphs 9, and 47), including:

receiving a user query from the translation component (**"a customized dictionary that can convert a natural language or keyword search query to a precise SQL query";** paragraph 9);

converting the received user query from any of the one or more other different languages into the base system language (**"convert received query information from one language, to another language that is compatible with the data source 20**"; paragraph 47);

converting the received user query in the base system language into the specified query format in accordance with definition rules that specifies query syntax and semantic information for the specified query format subsequent to converting the received user query into the base system language (**"a customized SQL query that uses terminology…identify synonyms**"; paragraphs 44, and 45);

returning the converted user query back to the translation component; wherein the translation component is further configured to pass the converted user query to a user query engine (**"the customized query 110 can be applied to the data source 20**" paragraph 31);

a query engine configured to receive a converted query from the translation component, submit the converted query to the database, receive a query response containing stored data responsive to the converted query from the database, the stored data in the base system language, and pass query response data back to the translation component (**"the customized query search results can be returned to the data access module 46 and thereafter transferred to the formatting module 48**

with the specified output format. The formatting module 48 can format the query results based on the specified format, and transfer the formatted output to the server 16 through the API 33"; paragraph 62).

However, Harris does not specifically teach that the translation component is further configured to receive the query response from the query engine and translate the stored data into any of the one or more other languages in accordance with proper punctuation, syntax and semantic of the other languages, translation including determining any of the one or more other different languages that the stored data is to be translated into, and for each of the one or more determined other different languages: referring to language specific translation tables to statically translate portions of the stored data; and for any portions of the stored data for which static translation is insufficient, dynamically translating the portions of the stored data through reference to an inference component, wherein the translation component is further configured to provide the stored data in the one or more other determined languages to the interface component.

Liddy et al., disclose, that this does not mean, however, **that retrieved documents could not then be translated, by machine or otherwise, if deemed appropriate by the user. Using the original language of the input text as a useful context for selecting the most appropriate sense of the words in a sentence.** With CINDOR, **only those few documents that obtain a high relevance ranking and show promise in their transliterated form become candidates for full translation, if desired. The selection of words could be based on (1) whether they have been**

indexed in the MCD, (2) their POS-tag assignment, (3) anaphoric disambiguation, and (4) meta-textual and discourse-level considerations, such as whether words and phrases are in the headline of a text...CINDOR thus ensures that only those few documents that are especially pertinent to a query will undergo the full translation process (col.7, lines 18 – 21; col.11, lines 56 – 58; col.22, lines 20 - 56).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to translate the retrieved documents as taught by Liddy et al., in view of Harris, so that the retrieved documents can be clearly understood by different groups of people (col.22, lines 30 - 35).

However, Harris in view of Liddy et al., do not specifically teach translation in according to proper punctuation, syntax and semantics of the other languages.

Park et al., teach that if there are translations generated, executing a comparison processing for the generated translations, based on a semantic category tree, thereby eliminating unnecessary ones of the translations; analyzing a collocation of the resultant translations by reference to a collocation information dictionary, thereby eliminating unnecessary one of the analyzed translations (col.2, lines 48 – 55; col.7, lines 9 - 14).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a semantic tree and a collocation information dictionary in translation as taught by Park et al., in Harris in view of Liddy et al., because that would eliminate an ambiguousness of words involved in the transformation of the queries; thereby generating a desired query usable as an input for the Web information retrieval system (col.2, lines 15 – 18).

Harris in view of Liddy et al., further in view of Park et al., do not specifically teach a multidimensional database that stores analytical data; a unit conversion component configured to convert units of measurement from the base system language into units of measurement of the one or more other determined languages.

Cook et al., teach a multidimensional database that stores analytical data; a unit conversion component configured to convert units of measurement from the base system language into units of measurement of the one or more other determined languages ("The multidimensional lookup table is optimized so as to not contain an excessive amount of data. Each entry contains a base value associated with a given input RGB value...conversion of distances from metric to English units can be performed trivially using linear interpolation or extrapolation from a look-up table having only two data points"; col.1, lines 57 – 60; col.3, lines 45 – 50).

Harris in view of Liddy et al., further in view of Park et al., contain a base process of translating the query input and the retrieved response in one or more other languages, which the claimed invention can be seen as an improvement in converting units of measurement from the base system language into units of measurement of the one or more other determined languages.

Cook et al., contain known technique of conversion component configured to convert units of measurement from the base system language into units of measurement of the one or more other determined languages using a multidimensional database (col.1, lines 57 – 60; col.3, lines 45 – 50) that is applicable to the base process.

Cook et al's known technique of conversion component configured to convert units of measurement from the base system language into units of measurement of the one or more other determined languages using a multidimensional database (col.1, lines 57 – 60; col.3, lines 45 – 50) would have recognized by one skilled in the art as applicable to the base process of Harris in view of Liddy et al., further in view of Park et al., and the results would have been predictable and resulted in translating portions of the stored data; translating the portions of the stored data through reference to an inference component; wherein the translation component further includes a unit conversion component configured to convert units of measurement from the base system language into unit of measurement of the one or more other determined languages using the multidimensional database, which results in an improved process.

Therefore, the claimed subject matter would have been obvious to a person having ordinary skill in the art at the time the invention was made.

As per claim 2, Liddy et al., further disclose a language identification component that determines the specified language of a user (col.7, line 26).

As per claims 4, Harris in view of Liddy et al., and further in view of Park et al., further disclose that the request is a structured query (Harris **"a precise SQL query; paragraph 9)** in the user's preferred language (Liddy et al., "enter queries in the user's native language"; col.2, lines 52 - 54).

As per claim 5, Liddy et al., further disclose that the request is a natural language request (col.2, lines 44, and 45).

As per claim 6, Liddy et al., further disclose that the translation component comprises: one or more translation tables; and a mapping component that maps retrieved data to its corresponding translation in a translation table (fig.4 shows translation tables that map French words to English words; col11, lines 13 – 15; col.15, lines 42 – 49).

As per claim 7, Liddy et al., further disclose that the translation tables are set up by a database administrator ("multilingual mapping terminology managers"; col.13, 18, and 19; col.22, lines 50 – 53).

As per claim 9, Liddy et al., further disclose that the inference component including a dictionary component to facilitate data translations (col.11, lines 32, and 60 – 64).

As per claim 10, Liddy et al., further disclose that a context analyzer that receives metadata associated with result data with the query response (Liddy et al., "meta-textual"; col.22, lines 27 – 29).

As per claim 12, Harris further disclose that the queries are specified in one of the other different languages (Harris, "**Searches or queries can be initiated using natural language…dynamically generated customized query can be formed…in a language written or spoken by humans**"; paragraphs 7, and 37);

As per claim 13, Liddy et al., further disclose that the request is a natural language request (col.2, lines 44, and 45).

As per claim 17, Harris further discloses that a dictionary component that dynamically translates data ("dictionary customized"; Abstract).

As per claim 18, Liddy et al., further disclose a sort component that receives collation information from a user and sorts resulting data in accordance with the collation information ("components in a query tend to occur in a certain repetitive sequence… documents are arranged in ranked order according to their relative relevance to the substance of a query"; col.17, lines 12, and 13; col.18, lines 35 – 37).

As per claim 19, Liddy et al., further disclose that the collation information includes the language to be used for sorting ("enter queries in the user's native language"; col.2, lines 52 - 54).

As per claim 20, Liddy et al., in view of Cook et al., further disclose that the translation component is configured translate data and metadata ("meta-textual") from a multidimensional database (Park et al., col.1, lines 57 – 60) in accordance with a received query ("database that includes documents in at least one other language of the plurality of supported languages"; col.2, lines 46 – 48; col.22, lines 20 - 56).

As per claim 21, Liddy et al., further disclose that the translation component maps resulting data and metadata to a translation table to produce translated data and metadata (fig.4 shows translation tables that map French words to English words; col11, lines 13 – 15; col.15, lines 42 – 49).

As per claim 22, Harris teach a computer-implemented method of querying data stored in a data store in a base system and that is queryable using a specified query format, the method comprising:

receiving a language selection, the language selection specifying a language from among one or more other different languages, the language selection being an indication that queries are to be entered and data presented in the specified language, the specified language corresponding to a language that humans use to verbally exchange information ("**Searches or queries can be initiated using natural language…dynamically generated customized query can be formed…in a language written or spoken by humans**"; paragraphs 7, and 37);

receiving a query in the specified language and in query format other than the specified query format; converting the received query into the specified query format in the base system language, the base system language corresponding to a second different language that humans used to verbally exchange information, including: converting the received query from the specified language into the base system language (**"a customized dictionary that can convert a natural language or keyword search query to a precise SQL query... A dictionary 18 can be equipped with a foreign language translator to convert received query information from one language, to another language that is compatible with the data source 20**"; paragraphs 9, and 47);

converting the received user query in the base system language into the specified query format in accordance with definition rules that specifies query syntax and semantic information for the specified query format subsequent to converting the received user query into the base system language (**"a customized SQL query that uses terminology...identify synonyms**"; paragraphs 44, and 45);

submitting the converted query to the data store, receiving a query response containing stored data responsive to the converted query from the data store, the stored data in the base system language (**"the customized query search results can be returned to the data access module 46 and thereafter transferred to the formatting module 48 with the specified output format. The formatting module 48 can format the query results based on the specified format, and transfer the formatted output to the server 16 through the API 33**"; paragraph 62).

However, Harris does not specifically teach translating the stored data from the base system language to the specified language including: referring to a language specific translation table to statically translate portions of the stored data; and for any portions of the stored data for which static translation is insufficient, dynamically translating the portions of the stored data through reference to an inference component; and utilizing context information to provide an accurate translation that conforms to proper punctuation, syntax, and semantics of the selected language; and providing the stored data in the specified language to an interface.

Liddy et al., disclose, that this does not mean, however, **that retrieved documents could not then be translated, by machine or otherwise, if deemed appropriate by the user. Using the original language of the input text as a useful context for selecting the most appropriate sense of the words in a sentence.** With CINDOR, **only those few documents that obtain a high relevance ranking and show promise in their transliterated form become candidates for full translation, if desired. The selection of words could be based on (1) whether they have been indexed in the MCD, (2) their POS-tag assignment, (3) anaphoric disambiguation, and (4) meta-textual and discourse-level considerations, such as whether words and phrases are in the headline of a text**...CINDOR thus ensures that only those few documents that are especially pertinent to a query will undergo the full translation process (col.7, lines 18 – 21; col.11, lines 56 – 58; col.22, lines 20 - 56).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to translate the retrieved documents as taught by Liddy et

al., in view of Harris, so that the retrieved documents can be clearly understood by different groups of people (col.22, lines 30 - 35).

However, Harris in view of Liddy et al., do not specifically teach utilizing context information to provide an accurate translation that conforms to proper punctuation, syntax and semantics of the language.

Park et al., teach that if there are translations generated, executing a comparison processing for the generated translations, based on a semantic category tree, thereby eliminating unnecessary ones of the translations; analyzing a collocation of the resultant translations by reference to a collocation information dictionary, thereby eliminating unnecessary one of the analyzed translations (col.2, lines 48 – 55; col.7, lines 9 - 14).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a semantic tree and a collocation information dictionary in translation as taught by Park et al., in Harris in view of Liddy et al., because that would eliminate an ambiguousness of words involved in the transformation of the queries; thereby generating a desired query usable as an input for the Web information retrieval system (col.2, lines 15 – 18).

Harris in view of Liddy et al., further in view of Park et al., do not specifically teach a multidimensional database that stores analytical data; a unit conversion component to convert units of measurement in the base language system to units of measurement in the specified language.

Cook et al., teach a multidimensional database that stores analytical data; a unit conversion component to convert units of measurement in the base language system

to units of measurement in the specified language ("The multidimensional lookup table is optimized so as to not contain an excessive amount of data. Each entry contains a base value associated with a given input RGB value...conversion of distances from metric to English units can be performed trivially using linear interpolation or extrapolation from a look-up table having only two data points"; col.1, lines 57 – 60; col.3, lines 45 – 50).

Harris in view of Liddy et al., further in view of Park et al., contain a base process of translating the query input and the retrieved response in one or more other languages, which the claimed invention can be seen as an improvement in converting units of measurement in the base language system to units of measurement in the specified language using a multidimensional database.

Cook et al., contain known technique of conversion component to convert units of measurement in the base language system to units of measurement in the specified language using a multidimensional database (col.1, lines 57 – 60; col.3, lines 45 – 50) that is applicable to the base process.

Cook et al's known technique of conversion component to convert units of measurement in the base language system to units of measurement in the specified language using a multidimensional database (col.1, lines 57 – 60; col.3, lines 45 – 50) would have recognized by one skilled in the art as applicable to the base process of Harris in view of Liddy et al., further in view of Park et al., and the results would have been predictable and resulted in statistically translating portions of the stored data; referring to a unit conversion component to convert units of measurement in the base

language system to units of measurement in the specified language, using the multidimensional database, Which results in an improved process.

Therefore, the claimed subject matter would have been obvious to a person having ordinary skill in the art at the time the invention was made.

As per claim 23, Harris in view of Liddy et al., and further in view of Park et al., further discloses entering a query in the specified language (Liddy et al., col.7, line 26).

As per claim 24, Liddy et al., further disclose retrieving metadata from a translation table, the metadata describing the stored data ("meta-textual"; col.22, lines 20 - 56).

As per claim 25, Liddy et al., further disclose dynamically translating the portions of the stored data through reference to an inference component comprises the inference component utilizing a dictionary (**"only those few documents that obtain a high relevance ranking and show promise in their transliterated form become candidates for full translation, if desired. The selection of words could be based on (1) whether they have been indexed in the MCD, (2) their POS-tag assignment, (3) anaphoric disambiguation, and (4) meta-textual and discourse-level considerations"** col.22, lines 20 - 56).

As per claim 26, Liddy et al., further disclose that the query is a natural language query (col.2, lines 44, and 45).

As per claim 27, Liddy et al., further disclose that data store is multidimensional database ("database that includes documents in at least one other language of the plurality of supported languages"; col.2, lines 46 – 48).

As per claim 28, Liddy et al., further disclose that a computer readable medium having stored thereon computer executable instructions for carrying out the method of claim 22 (col.4, lines 25 – 27).

As per claim 30, Liddy et al., in view of Park et al., and further in view of Harris further disclose that first language is selected from naming German, Spanish, Russian, French, and Chinese and the base system language is English (Liddy et al., "A current implementation supports English, French, German, Spanish, Dutch, and Italian. However, the system is modular, and as additional languages are added to the document databases, those languages become searchable"; col.3, lines 15 – 22).

As per claim 32, Liddy et al., in view of Park et al., and further in view of Harris further referring to a language specific translation table to statically translate portions of the stored data comprises mapping data and meta-data to the language specific

translation table (Liddy et al., fig.4 shows translation tables that map French words to English words; col.11, lines 13 – 15; col.15, lines 42 – 49; col.22, lines 20 - 56).

As per claim 33, Liddy et al., further disclose sorting the translated stored data based on collation properties specified by a user ("components in a query tend to occur in a certain repetitive sequence… documents are arranged in ranked order according to their relative relevance to the substance of a query"; col.17, lines 12, and 13; col.18, lines 35 – 37).

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to LEONARD SAINT CYR whose telephone number is (571)272-4247. The examiner can normally be reached on Mon- Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (571) 272-7602. The fax phone number for the organization where this application or proceeding is assigned is (571)-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic

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LS
07/27/10
/Leonard Saint-Cyr/
Examiner, Art Unit 2626